Blast of SEQ ID NO:1 versus human genomic sequence

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MEGABLAST 1.2.3-Paracel [2001-11-20]
Reference:
Zheng Zhang, Scott Schwartz, Lukas Wagner, and Webb Miller (2000),
 "A greedy algorithm for aligning DNA sequences",
J Comput Biol 2000; 7(1-2):203-14.
Database: Homo_sapiens.latestgp.masked.fa
         33.840 sequences; 200,810,911,373 total letters
Query= 1
        (3753 letters)
                                                    Score
Sequences producing significant alignments:
                                                    (bits) Value
AL033377.2.1.135090
                                                       1245 0.0
AL360007.11.1.90011
                                                       198 2e-47
>AL033377.2.1.135090
        Length = 135090
 Score = 1245 bits (628), Expect = 0.0
 Identities = 628/628 (100%)
 Strand = Plus / Plus
Query: 444
           agttgccgtgtccttaaggaatcaaaaggtcattttaccccagacatcagatgcttacca 503
           Sbjct: 36010 agttgccgtgtccttaaggaatcaaaaggtcattttaccccagacatcagatgcttacca
36069
Ouery: 504
           ggtatctgttgcaaaaagcatctctattccagagctcagtgctttcacactctgctttga 563
           Sbjct: 36070 ggtatctgttgcaaaaagcatctctattccagagctcagtgctttcacactctgctttga
36129
          agcaaccaaagttggccatgaagacagtgattggacagctttctcctactcaaatgcatc 623
Query: 564
           Sbjct: 36130 agcaaccaaagttggccatgaagacagtgattggacagctttctcctactcaaatgcatc
36189
Query: 624
          cttcacacaattgctcagttttggaaaggccaagagtggctactttctatccatttctga 683
           Sbjct: 36190 cttcacacaattgctcagttttggaaaggccaagagtggctactttctatccatttctga
36249
Query: 684
          ttcaaaatgtttgttgaataatgcattacctgtcaaagaaaaagaagacatttttgcaga 743
          Sbjct: 36250 ttcaaaatgtttgttgaataatgcattacctgtcaaagaaaaagaagacatttttgcaga
36309
```

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aagctttgaacagctctgccttgtttggaataattctttgggctctattggtgtaaattt 803
Query: 744
         Sbjct: 36310 aagctttgaacagctctgccttgtttggaataattctttgggctctattggtgtaaattt
36369
         caaaagaaactatgaaacagttccatgtgattctaccattagtaaagttattcctgggaa 863
Query: 804
         Sbjct: 36370 caaaagaaactatgaaacagttccatgtgattctaccattagtaaagttattcctgggaa
36429
         tgggaaattgttgttgggctccaatcaaaatgaaattgtctctctaaaaggggacattta 923
         Sbjct: 36430 tgggaaattgttgttgggctccaatcaaaatgaaattgtctctctaaaaggggacattta
36489
         taactttcgactttggaattttaccatgaatgccaaaatcctctccaacctcagctgtaa 983
Query: 924
         Sbjct: 36490 taactttcgactttggaattttaccatgaatgccaaaatcctctccaacctcagctgtaa
36549
         tgtgaaagggaatgtagtcgactggcaaaatgacttctggaatatcccaaacctagctct
Query: 984
1043
         Sbjct: 36550 tgtgaaagggaatgtagtcgactggcaaaatgacttctggaatatcccaaacctagctct
36609
Query: 1044 gaaagctgaaagcaacctaagctgtggt 1071
         Sbjct: 36610 gaaagctgaaagcaacctaagctgtggt 36637
Score = 690 bits (348), Expect = 0.0
Identities = 348/348 (100%)
Strand = Plus / Plus
         cagcagtgtggggatgtgccaactgccgagtggttttgtccaacccttctgggaccttta 157
Query: 98
         Sbjct: 33405 cagcagtgtggggatgtgccaactgccgagtggttttgtccaacccttctgggaccttta
33464
         cttctccatgctaccctaacgactacccaaacagccaggcttgcatgtggacgctccgag 217
Query: 158
         Sbjct: 33465 cttctccatgctaccctaacgactacccaaacagccaggcttgcatgtggacgctccgag
33524
         ccccaccggttatatcattcagataacatttaacgactttgacattgaagaagctccca 277
Query: 218
```

7.3

Sbjct: 33525 cccccaccggttatatcattcagataacatttaacgactttgacattgaagaagctccca 33584 attgcatttatgactcattatcccttgataatggagagagccagactaaattttgtggag 337 Query: 278 Sbjct: 33585 attgcatttatgactcattatcccttgataatggagagagccagactaaattttgtggag 33644 caactgccaaaggcctatcatttaactcaagtgcgaatgagatgcatgtgtccttttcaa 397 Query: 338 Sbjct: 33645 caactgccaaaggcctatcatttaactcaagtgcgaatgagatgcatgtgtccttttcaa gtgactttagcatccagaagaaaggtttcaatgccagctacatcagag 445 Query: 398 Sbjct: 33705 gtgactttagcatccagaagaaaggtttcaatgccagctacatcagag 33752 Score = 565 bits (285), Expect = e-158 Identities = 285/285 (100%) Strand = Plus / Plus Query: 3036 ctgttggattcaagatccagtcatattttatgtgacctgtgctgggtattttggagtcat 3095 Sbjct: 85663 ctgttggattcaagatccagtcatattttatgtgacctgtgctgggtattttggagtcat 85722 Query: 3096 gttttttctgaacattgccatgttcattgtggtaatggtgcagatctgtgggaggaatgg Sbjct: 85723 gttttttctgaacattgccatgttcattgtggtaatggtgcagatctgtgggaggaatgg 85782 Query: 3156 caagagaagcaaccggaccctgagagaagaagtgttaaggaacctgcgcagtgtggttag 3215 Sbjct: 85783 caagagaagcaaccggaccctgagagaagaagtgttaaggaacctgcgcagtgtggttag 85842 Query: 3216 cttgacctttctgttgggcatgacatggggttttgcattctttgcctggggacccttaaa 3275 Sbjct: 85843 cttgacctttctgttgggcatgacatggggttttgcattctttgcctggggacccttaaa 85902 Query: 3276 tatccccttcatgtacctcttctccatcttcaattcattacaagg 3320

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Sbjct: 85903 tatccccttcatgtacctcttctccatcttcaattcattacaagg 85947

Score = 537 bits (271), Expect = e-149Identities = 271/271 (100%) Strand = Plus / Plus Query: 2670 gaaattgcgaagggattatccctccaaaatcttgatgaacctgagcacagccctgctgtt 2729 Sbjct: 81638 gaaattgcgaagggattatccctccaaaatcttgatgaacctgagcacagccctgctgtt 81697 2789 81757 Query: 2790 cattgctgttgcagtcctgttgcatttcttccttctggcaacctttacctggatggggct 2849 Sbjct: 81758 cattgctgttgcagtcctgttgcatttcttccttctggcaacctttacctggatggggct 81817 Query: 2850 agaagcaattcacatgtacattgctctagttaaagtatttaacacttacattcgccgata Sbjct: 81818 agaagcaattcacatgtacattgctctagttaaagtatttaacacttacattcgccgata 81877 Query: 2910 cattctaaaattctgcatcattggctggggt 2940 Sbjct: 81878 cattctaaaattctgcatcattggctggggt 81908 Score = 420 bits (212), Expect = e-114Identities = 215/216 (99%) Strand = Plus / Plus Query: 1740 tttaaaagaagcaaatgaagttgctaaccagattttaaatttaactgctgatgggcagaa 1799 Sbjct: 68457 tttagaagaagcaaatgaagttgctaaccagattttaaatttaactgctgatgggcagaa 68516

Query: 1800 cttaacctcagccaatattaccaacattgtggaacaggtcaaaagaattgtgaataaaga 1859

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Sbjct: 68517 cttaacctcagccaatattaccaacattgtggaacaggtcaaaagaattgtgaataaaga 68576 Query: 1860 agaaaacattgatataacacttggctcaactctaatgaatatattttctaatatcttaag 1919 Sbjct: 68577 agaaaacattgatataacacttggctcaactctaatgaatatattttctaatatcttaag 68636 Query: 1920 cagttcagacagtgacttgcttgagtcatcttctga 1955 Sbjct: 68637 cagttcagacagtgacttgcttgagtcatcttctga 68672 Score = 361 bits (182), Expect = 2e-96 Identities = 182/182 (100%) Strand = Plus / Plus Query: 3572 ${\tt cagacagtgcttccatggacaagtccttgtcaaaactggcccatgctgatggagatcaaa}$ 3631 Sbjct: 109176 cagacagtgcttccatggacaagtccttgtcaaaactggcccatgctgatggagatcaaa 109235 Query: 3632 catcaatcatccctgtccatcaggtcattgataaggtcaagggttattgcaatgctcatt 3691 Sbjct: 109236 catcaatcatccctgtccatcaggtcattgataaggtcaagggttattgcaatgctcatt 109295 cagacaacttctataaaaatattatcatgtcagacaccttcagccacagcacaaagtttt Query: 3692 3751 Sbjct: 109296 cagacaacttctataaaaatattatcatgtcagacaccttcagccacagcacaaagtttt 109355 aa 3753 Query: 3752 Sbjct: 109356 aa 109357

Score = 341 bits (172), Expect = 2e-90
Identities = 172/172 (100%)
Strand = Plus / Plus

Query: 1956 agctttaaaaacaattgatgaattggccttcaagatagacctaaatagcacatcacatgt 2015

, ;

Sbjct: 69644 agctttaaaaacaattgatgaattggccttcaagatagacctaaatagcacatcacatgt 69703 Query: 2016 gaatattacaactcggaacttggctctcagcgtatcatccctgttaccagggacaaatgc 2075 Sbjct: 69704 gaatattacaactcggaacttggctctcagcgtatcatccctgttaccagggacaaatgc 69763 Query: 2076 aatttcaaattttagcattggtcttccaagcaataatgaatcgtatttccag 2127 Sbjct: 69764 aatttcaaattttagcattggtcttccaagcaataatgaatcgtatttccag 69815 Score = 309 bits (156), Expect = 7e-81 Identities = 156/156 (100%) Strand = Plus / Plus Query: 3419 cagattggagtaagacagctaccaatatcatcaagaaaagttctgataatctaggaaaat 3478 Sbjct: 104051 cagattggagtaagacagctaccaatatcatcaagaaaagttctgataatctaggaaaat 104110 $\verb|ctttgtcttcaagctccattggttccaactcaacctatcttacatccaaatctaaatcca|\\$ Query: 3479 3538 Sbjct: 104111 ctttgtcttcaagctccattggttccaactcaacctatcttacatccaaatctaaatcca 104170 Query: 3539 gctctaccacctatttcaaaaggaatagccacacag 3574 Sbjct: 104171 gctctaccacctatttcaaaaggaatagccacacag 104206 Score = 287 bits (145), Expect = 3e-74Identities = 145/145 (100%) Strand = Plus / Plus Query: 2125 cagatggattttgagagtggacaagtggatccactggcatctgtaattttgcctccaaac Sbjct: 71527 cagatggattttgagagtggacaagtggatccactggcatctgtaattttgcctccaaac 71586

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71646
 Query: 2245 ttcaacaaaactggacttttccagg 2269
          11111111111111111111111111
 Sbjct: 71647 ttcaacaaaactggacttttccagg 71671
 Score = 283 bits (143), Expect = 4e-73
 Identities = 146/147 (99%)
 Strand = Plus / Plus
Query: 1423 aggttggtgctttgggcccttctagtttacaatgctaccaacaatactaatttagaagga
          Sbjct: 63453 aggttggtgctttgggcccttctagtttacaatgctaccaacaatactaatttggaagga
63512
Query: 1483 aaaatcattcagcagaagctcctaaaaaataatgagtccttggatgaaggcttgaggcta
1542
          Sbjct: 63513 aaaatcattcagcagaagctcctaaaaaataatgagtccttggatgaaggcttgaggcta
         catacagtgaatgtgagacaactgggt 1569
Query: 1543
          Sbjct: 63573 catacagtgaatgtgagacaactgggt 63599
 Score = 258 bits (130), Expect = 2e-65
 Identities = 130/130 (100%)
 Strand = Plus / Plus
Query: 2541 ggaccttccaagaagtgcctcacagttagatgcaagaaacactaaagtcctcactttcat
2600
         Sbjct: 80810 ggaccttccaagaagtgcctcacagttagatgcaagaaacactaaagtcctcactttcat
80869
Query: 2601 cagctatattgggtgtggaatatctgctattttttcagcagcaactctcctgacatatgt
2660
         Sbjct: 80870 cagctatattgggtgggaatatctgctattttttcagcagcaactctcctgacatatgt
80929
         tgcttttgag 2670
```

Query: 2661

Sbjct: 80930 tgcttttgag 80939

Score = 244 bits (123), Expect = 3e-61Identities = 123/123 (100%) Strand = Plus / Plus Query: 2267 aggatgtaggaccccaaagaaaaactttagtgagttatgtgatggcgtgcagtattggaa 2326 Sbjct: 73990 aggatgtaggaccccaaagaaaactttagtgagttatgtgatggcgtgcagtattggaa 74049 Query: 2327 acattactatccagaatctgaaggatcctgttcaaataaaaatcaaacatacaagaactc Sbjct: 74050 acattactatccagaatctgaaggatcctgttcaaataaaaatcaaacatacaagaactc 74109 Query: 2387 agg 2389 Sbjct: 74110 agg 74112 Score = 224 bits (113), Expect = 3e-55Identities = 113/113 (100%) Strand = Plus / Plus Query: 1567 ggtcattgtcttgccatggaggaacccaaaggctactactggccatctatccaaccttct 1626 Sbjct: 66326 ggtcattgtcttgccatggaggaacccaaaggctactactggccatctatccaaccttct 66385 Query: 1627 gaatacgttcttccttgtccagacaagcctggcttttctgcttctcggatatg 1679 Sbjct: 66386 gaatacgttcttccttgtccagacaagcctggcttttctgcttctcggatatg 66438 Score = 214 bits (108), Expect = 3e-52Identities = 112/113 (99%), Gaps = 1/113 (0%) Strand = Plus / Plus Query: 2431 aaca-aaagttttggaggatggaacacgtcaggatgtgttgcacacagagattcagatgc 2489

Sbjct: 77142 aacagaaagttttggaggatggaacacgtcaggatgtgttgcacacagagattcagatgc

77201

Query: 2490 aagtgagacagtctgcctgtgtaaccacttcacacactttggagttctgatgg 2542 Sbjct: 77202 aagtgagacagtctgcctgtgtaaccacttcacacactttggagttctgatgg 77254

Score = 198 bits (100), Expect = 2e-47 Identities = 103/104 (99%) Strand = Plus / Plus

aggettatttatattcatettecaetgtgetatgaaggagaatgttcagaaacagtggeg Query: 3318 3377

Sbjct: 103274 aggcttatttatattcatcttccactgtgctatgaaggagaatgttcagaaacagtggcg

103333

gcggcatctctgctgtggtagatttcggttagcagataactcag 3421

Sbjct: 103334 gcagcatctctgctgtggtagatttcggttagcagataactcag 103377

Score = 172 bits (87), Expect = 1e-39

Identities = 87/87 (100%)Strand = Plus / Plus

Query: 1222 gatggaattatctatagaatatccgtagtgattcagaacatccttcgtcaccctgaggta 1281

Sbjct: 56099 gatggaattatctatagaatatccgtagtgattcagaacatccttcgtcaccctgaggta 56158

Query: 1282 aaagtacagagcaaggtggcagaatgg 1308

1111111111111111111111111111 Sbjct: 56159 aaagtacagagcaaggtggcagaatgg 56185

Score = 170 bits (86), Expect = 4e-39Identities = 86/86 (100%)

Strand = Plus / Plus

Query: 1137 agctactgtaaactctcctagtactacaccaccactgtcaccactaacatgcctgttac 1196

Sbjct: 49600 agctactgtaaactctcctagtactacaccaccactgtcaccactaacatgcctgttac 49659

Query: 1197 taacagaatcgataaacaaaggaatg 1222

11111111111111111111111111 Sbjct: 49660 taacagaatcgataaacaaaggaatg 49685 Score = 139 bits (70), Expect = 1e-29 Identities = 70/70 (100%) Strand = Plus / Plus Query: 1069 ggttcctacctgatcccgctcccagcagcagaactggccagctgtgcagacctggggacc 1128 Sbjct: 47792 ggttcctacctgatcccgctcccagcagcagcagcagctgtgcagacctggggacc 47851 Query: 1129 ctctgtcaag 1138 11111111 Sbjct: 47852 ctctgtcaag 47861 Score = 133 bits (67), Expect = 9e-28 Identities = 67/67 (100%) Strand = Plus / Plus Query: 1360 agttttcacctgagtgctggagaggacaagattaaagtcaagagaagccttgaggatgag 1419 Sbjct: 59736 agttttcacctgagtgctggagaggacaagattaaagtcaagagaagccttgaggatgag 59795 Query: 1420 ccaaggt 1426 1111111 Sbjct: 59796 ccaaggt 59802 Score = 131 bits (66), Expect = 4e-27 Identities = 66/66 (100%) Strand = Plus / Plus Query: 1679 gtttttacaatgctaccaacccattggtaacctactggggacctgttgatatctccaact Sbjct: 67835 gtttttacaatgctaccaacccattggtaacctactggggacctgttgatatctccaact

Query: 1739 gtttaa 1744

|||||| Sbjct: 67895 gtttaa 67900

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Score = 107 bits (54), Expect = 5e-20
Identities = 54/54 (100%)
Strand = Plus / Plus

Query: 1308 gctcaattcaaccttccaaaattggaactacacggtttatgtcgttaatatcag 1361

Sbjct: 58789 gctcaattcaaccttccaaaattggaactacacggtttatgtcgttaatatcag 58842

Score = 103 bits (52), Expect = 8e-19
Identities = 52/52 (100%)
Strand = Plus / Plus

Query: 2938 ggtttgcctgccttagtggtgtcagttgttctagcgagcagaaacaacaatg 2989

Sbjct: 83114 ggtttgcctgccttagtggtgtcagttgttctagcgagcagaaacaacaatg 83165

Score = 95.6 bits (48), Expect = 2e-16
Identities = 55/57 (96%), Gaps = 1/57 (1%)
Strand = Plus / Plus

>AL360007.11.1.90011 Length = 90011

Score = 198 bits (100), Expect = 2e-47
Identities = 100/100 (100%)
Strand = Plus / Plus

Query: 1 atgtttcgctcagatcgaatgtggagctgccattggaaatggaagcccagtcctctcctg 60.

Sbjct: 65298 atgtttcgctcagatcgaatgtggagctgccattggaaatggaagcccagtcctctcctg

65357

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